

SEQUENCE LISTING



<110> Marks, James D

Poul, Marie A

<120> INTERNALIZING ERB2 ANTIBODIES

<130> 2500.116US3 Internalizing ErbB2 Ab

<140> 09/250,056

<141> 1999-02-12

<150> 60/082,953

<151> 1998-04-24

<160> 4

<170> PatentIn Ver. 2.0

<210> 1

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: scFv F5 amino
acid sequence

<220>

<221> DOMAIN

<222> (31)..(35)

<223> VH-CDR1

<220>

<221> DOMAIN

<222> (50) .. (66)

<223> VH-CDR2

<220>

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<222> (99) .. (108)

<223> VH-CDR3

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<221> DOMAIN

<222> (157) .. (170)

<223> VL-CDR1

<220>

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<222> (186) .. (192)

<223> VL-CDR2

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<222> (225) .. (235)

<223> VL-CDR3

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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

1

5

10

15

ml
B³
n/

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Tyr

20

25

30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35

40

45

Ser Ala Ile Ser Gly Arg Gly Asp Asn Thr Tyr Tyr Ala Asp Ser Val

50

55

60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

65

70

75

80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Lys Met Thr Ser Asn Ala Phe Ala Phe Asp Tyr Trp Gly Gln Gly

100

105

110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly

115

120

125

Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val

130

135

140

Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser

145

150

155

160

Ser Asn Ile Gly Ala Gly Tyr Gly Val His Trp Tyr Gln Gln Leu Pro

165

170

175

Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Thr Asn Arg Pro Ser

180

185

190

Gly Val Pro Asp Arg Phe Ser Gly Phe Lys Ser Gly Thr Ser Ala Ser

195

200

205

Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys

210

215

220

Gln Phe Tyr Asp Ser Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr

225

230

235

240

Lys Leu Thr Val Leu Gly

245

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<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: scFv C1 amino
acid sequence

<220>

<221> DOMAIN

<222> (31) .. (35)

<223> VH-CDR1

<220>

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<222> (50) .. (66)

<223> VH-CDR2

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<222> (157) .. (167)

<223> VL-CDR1

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<222> (184) .. (190)

<223> VL-CDR2

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<221> DOMAIN

<222> (223) .. (231)

<223> VL-CDR3

<400> 2

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

1

5

10

15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

20

25

30

Ala Met Gly Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35

40

45

Ser Ser Ile Ser Gly Ser Ser Arg Tyr Ile Tyr Tyr Ala Asp Ser Val

50

55

60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

65

70

75

80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Lys Met Asp Ala Ser Gly Ser Tyr Phe Asn Phe Trp Gly Gln Gly

100

105

110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly

115

120

125

Ser Gly Gly Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser Pro Ser Phe

130

135

140

Leu Ser Ala Phe Val Gly Asp Arg Ile Thr Ile Thr Cys Arg Ala Ser

145

150

155

160

Pro Gly Ile Arg Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys

165

170

175

Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val

180

185

190

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr

195

200

205

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln

210

215

220

Tyr Asn Ser Tyr Pro Leu Ser Phe Gly Gly Gly Thr Lys Val Glu Ile

225

230

235

240

Lys Arg

<210> 3

<211> 738

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: nucleic acid

encoding scFv F5 Ab

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ccaggggaagg ggctggagtg ggtctcagct attagtggtc gtggtgataa cacatactac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgttt attactgtgc gaaaatgaca 300
 agtaacgcgt tcgcatttga ctactggggc cagggaaacc tggtcaccgt ctctcaggt 360
 ggaggcgggt caggcggagg tggctctggc ggtggcggat cgcagtctgt gttgacgcag 420
 ccgcctcag tgtctggggc cccagggcag agggtcacca tctctgcac tgggagcagc 480
 tccaacatcg gggcagggtta tgggtgtacac tggtagcagc agcttccagg aacagccccc 540
 aaactcctca tctatggtaa caccaatcgg ccctcagggg tccctgaccg attctctggc 600
 ttcaagtctg gcacctcagc ctccctggcc atcactgggc tccaggctga ggatgaggct 660
 gattattact gccagttcta tgacagcagc ctgagtgggt ggggtgttcg cggagggacc 720
 aagctgaccg tgctaggt 738

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<211> 726

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Nucleic acid
 encoding scFv C1 amino acid sequence

<220>

<221> modified_base

<222> (111)

<223> N = A, C, G, OR T

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 tctgtgagc cctctggatt cacctttagc agctatgcc a tgggctgggt ncgccaggct 120
 ccaggggaagg ggctggagtg ggtctcatca attagtggca gtagtagata catatattac 180
 gcagactccg tgaagggccg gttcaccatc tcccagagaca attccaagaa cacgctgtat 240
 ctgcaaatga acagcctgcg agccgaggac acggccgttt attactgtgc gaaaatggat 300

gcttcgggga gttattttaaa tttctggggc cagggcaccc tggtcaccgt ctctcaggt 360
 ggaggcggtt caggcgagg tggctctggc ggtggcgat cggaaacgac actcacgcag 420
 tctccatcct tctgtctgc attttagga gacagaatca ccatcacttg ccgggccagt 480
 ccgggcatta ggaattattt agcctggtat cagcaaaaac cagggaagc ccctaagctc 540
 ctgatctatg ctgcatctac ttgcaaagt ggggtcccat caagggtcag cggcagtgga 600
 tctgggacag attttactct caccatcagc agcctgcagc ctgaagattt tgcaacttat 660
 tattgtcaac aatataatag ttaccctctc agtttcggcg gagggaccaa ggtggagatc 720
 aaacgt 726

Mb
 B3 ✓

a'
 ant